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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/732,737

12/10/2003

Frank Joseph Feuerborn

VTECH-66

6676

26875 7590 03/17/2008

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EXAMINER

CHARLES, MARCUS

ART UNIT

PAPER NUMBER

3682

MAIL DATE

DELIVERY MODE

03/17/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/732,737	<b>Applicant(s)</b> FEUERBORN, FRANK JOSEPH	
	<b>Examiner</b> Marcus Charles	<b>Art Unit</b> 3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12-10-2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

This action is responsive to the amendment filed 12-10-2007, which has been entered.

Claims 1-3 and 5 are currently pending.

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hitchcock et al. in view of EP (0346676). Hitchcock et al. discloses a multiple rib V-belt comprising a belt body (12') formed in a continuous loop (fig. 1); a plurality of v-shaped grooves (48) formed in the belt body and spaced apart to define a plurality of circumferentially extending ribs (46). Hitchcock et al. also teaches reducing the depth of the groove from a standard dimension by reducing the tip (46, see fig. 6) to a flat surface (54) in order to prevent cracks due to backward bending (col. 4) and the groove depth is reduced by 0.91 mm (note the original groove depth is 3.45mm and the depth after reduction is 2.54 mm) and the angle between the ribs are 40° to a tolerance of ±0.5 (col. 4, lines 65-68). Hitchcock et al. fail to disclose the depth of the groove is approximately 0.070 inch (1.79 mm) and the belt has an overall thickness of approximately 0.145 inch (3.68 mm) to approximately 0.155 inch (3.94 mm). EP (0346676) discloses a poly v-belt having a groove depth of 1.6 mm, which is equivalent

to 0.062 inch and a thickness of 3.6 mm, which is equivalent to 0.142 inch. These values are within the specified ranges. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the belt of Hitchcock et al. to include the dimensions of EP (0346676) in order to reduce friction and reduce compressive stresses in the lower part and to increase the life span of the belt.

In claim 2, note Hitchcock et al. disclose the tips (46) are truncated (col. 4, lines 20-65).

3. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hitchcock et al. In claims 3-4, Hitchcock et al. disclose the claimed invention but do not disclose the approximate amount by which the groove depth is reduced is 0.015 inch (.381). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the belt so the approximate amount by which the groove depth is reduced is 0.015 inch (.381), since it has been held that where the general condition of the claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233. In addition, the required height and depth are subject to and related to a particular pulley groove and the application thereof.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hitchcock et al. in view of EP (0346676) as applied to claim 1 above, and further in view of Hull. Hitchcock et al. does not disclose the belt is defined by cogs along the ribs. It is well known in the art for a belt to be defined by cogs along the length of the ribs in order to increase flexibility when the belt is wrapped around the pulley. Hull clearly discloses a belt having a plurality of longitudinally extended ribs (25) and each rib defined by

spaced cogs (28) along the longitudinal length in order to improve belt life. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the belt of Hitchcock et al. so as to include cogs in view of Hull to increase flexibility when the belt is wrapped around the pulley, improve belt life and prevent cracking.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1-3 and 5 have been considered but are moot in view of the new ground(s) of rejection.

6. Applicant's arguments filed 12/10/2007 have been fully considered but they are not persuasive. Applicant contended that the belt (1) of the prior art to EP (0346676) is not a K section v-belt. It should be noted that applicant has not provide any convincing reason (s) as to why the belt is not considered a K section v-belt. It should be noted that the belt (1) has all the qualities of a K section v-belt and is similar to the belt of the claimed invention. Note in fig.1, the belt has longitudinal grooves and reinforcement cords (5) extending in the longitudinal extent of the belt, which are the requirements of a K section v-belt. It should be also noted that the description of the belt in col. 2, lines 44-54 and col. 4, clearly defines the belt having the criteria of a K section v-belt. Therefore, applicant's argument that the belt is not a K section v-belt without any convincing description or explanation to substantiate applicant argument is not persuasive and has no merit. In addition, applicant does not specify what type of belt is that of EP (0346676). Therefore, for reasons given above the rejection is deemed proper.

***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus Charles whose telephone number is (571) 272-7101. The examiner can normally be reached on Monday-Thursday 7:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ridley Richard can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3682

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Marcus Charles/

*Marcus Charles*

Primary Examiner, Art Unit 3682